

REMARKS

In the Office Action dated May 4, 2004, claims 16, 21, and 22 were objected to; claims 17-20 were rejected under 35 U.S.C. § 112, ¶ 2; claims 1-15, 23-29, 30 and 31 were rejected under § 101; and claims 1-31 were rejected under § 103 over U.S. Patent No. 6,067,542 (Carino) and U.S. Patent No. 5,857,192 (Fitting).

CLAIM OBJECTIONS

Claims 16, 21, and 22 were objected to because “use of the computer has not been explicitly indicated in the claims.” 5/4/2004 Office Action at 1. Applicant respectfully submits that explicit claiming of a “computer” is not necessary in these claims. Withdrawal of this objection is respectfully requested.

REJECTION UNDER 35 U.S.C. § 112

Claim 17 has been amended to address the antecedent basis rejection.

REJECTION UNDER 35 U.S.C. § 101

Claims 1-15, 23-29, 30 and 31 were rejected as being directed to non-statutory subject matter.

With respect to claims 23-31, the Office Action stated that these claims “merely recite a number of computing steps without producing any tangible result and/or being limited to a practical application within the technological arts.” 5/4/2004 Office Action at 2.

Applicant respectfully disagrees with the assertion made in the Office Action that these claims are directed to non-statutory subject matter. As stated in the M.P.E.P., “[w]hen functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized.” M.P.E.P. § 2106 (8th ed., Rev. 2) at 2100-12. Although the word “computer” is not explicitly used, Applicant notes that the instructions are contained in a

storage medium that when *executed* cause a *system* to perform the recited acts. The term “system” can refer to any number of systems as supported in the specification of the present application. For example, the system can include a database system, a test system, an emulation client system, and so forth. As also supported by the specification, such systems include control units, processors, storage units, and other components to enable performance of various acts according to some embodiments of the invention. The fact that the term “computer” is not explicitly used in the claims does not remove the subject of the claims from being statutory subject matter. In fact, it is clear from the context of the present application that the term “system” refers to a platform that includes hardware and/or software. Therefore, claims 23-31 are directed towards statutory subject matter.

Claims 1-15 also recite statutory subject matter. Claim 1 (from which claims 2-15 depend) recites a method that includes several acts. The “importing” act of claim 1 recites the importing of environment information of a target database system into a test system. The “using” act of claim 1 recites using random sample statistics in performing a query plan analysis for a given query in the test system. Thus, it is clear that the method of claim 1 is applied to specific platforms (in this case a target database system and a test system). Therefore, even though the term “computer” is not explicitly used, it is respectfully submitted that claim 1 is directed toward statutory subject matter. The tangible results produced by the acts recited in claim 1 include the importing of environment information from one system to another system (the target database system to the test system) and the use of random sample statistics in performing query plan analysis in the test system.

In view of the foregoing, it is respectfully requested that the § 101 rejection be withdrawn.

REJECTION UNDER 35 U.S.C. § 103

It is respectfully submitted that a *prima facie* case of obviousness has not been established with respect to the claims. The Office Action has failed to satisfy at least the

following two elements of a *prima facie* case: (1) there must be some motivation or suggestion to combine the reference teachings; and (2) the references, when combined, must teach or suggest all elements of the claim. *See* M.P.E.P. § 2143, at 2100-129.

As conceded by the Office Action, Carino does not disclose importing environment information of a target database system into a test system. Although the Office Action did not so state, Carino also fails to disclose using random sample statistics of the imported environment information in performing query plan analysis for a given query *in the test system*. Carino teaches a database management system that includes an optimizer for generating an execution plan based on tuple statistics, indexes, and/or sampling. Carino, 14:58-59. There is no suggestion provided of any desirability or need to import environment information of such a relational database management system into a test system. Although the Office Action cited Fitting as disclosing a test system, Fitting does not teach or suggest importing environment information of a target database system into a test system, and then using random sample statistics of the environment information in performing a query plan analysis in the test system. Fitting describes an arrangement in which a test system is able to send a request to a database, with the request being in the form of an empty file name that includes the product identifier and a label indicating the type of data requested. Fitting, 2:11-13. In response to this request, the database server generates a query to retrieve the requested data. Fitting, 6:17-19. The retrieved data is then used by the database server to create a return file, which is performed by renaming the request file issued by the test system. Fitting, 6:39-43. The information returned includes a product identifier and a model number. Fitting, 6:20-24. Providing a product identifier and model number of a product (that is to be tested by a test system) is *not* the same as importing environment information of a target database system into a test system, where the environment information includes random sample statistics of the target database system. What the test system of Fitting seeks in its request to the database is specific information of a product that is to be tested. Such information relating to a product to be tested is clearly not environment information *of a target database system*. Therefore, even if the teachings of Carino and Fitting can be properly

combined, the hypothetical combination of Carino and Fitting does not teach or suggest *all elements* of claim 1. The *prima facie* case of obviousness has thus not been established with respect to claim 1 for at least this reason.

Moreover, there is simply no motivation or suggestion to combine the teachings of Carino and Fitting. Whereas Carino relates to techniques used in a relational database management system that includes an optimizer for generating an execution plan based on various criteria, Fitting relates to a quality control system that employs bi-directional messaging between a test system and a database. This enables the test system to retrieve information of a product that is to be tested, including the identifier and model number of the product to be tested. There is absolutely no reason or desirability to incorporate the product testing system described in Fitting into the system of Carino. A person of ordinary skill in the art would not have been motivated to combine the teachings of Carino and Fitting to achieve the claimed invention. Therefore, a *prima facie* case of obviousness is defective for at least this further reason.

In view of the foregoing, withdrawal of the obviousness rejection of claim 1 is respectfully requested. Independent claims 16, 23, and 30 are similarly allowable over the asserted combination of Carino and Fitting.

Dependent claims are allowable for at least the same reasons as corresponding independent claims. Moreover, with respect to dependent claim 3, which depends indirectly from claim 1, the hypothetical combination of Carino and Fitting fails to disclose a target database system having plural access modules, and importing random sample statistics associated with *less than all* of the access modules. The Office Action cited to column 7, lines 56-60, of Carino as teaching this feature. However, the cited passage of Carino refers to “two primary modes of access to the Multimedia Registry 302.” The cited passage also refers to end points being in a client-server environment. However, there is absolutely no indication whatsoever in the cited passage of Carino, or anywhere else in Carino, of importing random samples associated with less than all of the

access modules of a target database system. Claim 17 (which depends from claim 16) is similarly allowable over the asserted combination of references.

With respect to claim 10 (which depends from claim 1), the hypothetical combination of Carino and Fitting does not disclose or suggest *emulating* an environment of the target database system using the random sample statistics. The Office Action cited to a passage in column 12 and a passage in column 18 of Carino as teaching the emulating feature. However, the cited column 18 passage (lines 9-31) refers to tasks performed by a UDF. The cited column 12 passage (lines 24-34) refers to a federated coordinator that facilitates vertical table partitioning. However, neither passage is related at all to emulating an environment using random sample statistics. Claim 32 (which depends from claim 16) and claim 33 (which depends from claim 30) are similarly allowable over the asserted combination of references.

Claim 14 (which depends from claim 1) recites using an SQL DIAGNOSTIC statement to identify random sample statistics to capture. Neither Carino nor Fitting even remotely suggests such an SQL DIAGNOSTIC statement. The Office Action cited to column 14, lines 53-59, of Carino as teaching this feature. The cited passage refers to the abstract data type and UDF of SQL3. However, there is nothing in this passage that even remotely suggests use of an SQL DIAGNOSTIC statement. Claim 15 (which depends from 14), and claims 25 and 26 (which depend indirectly from claim 23) are allowable over the asserted combination of references for similar reasons.

In view of the foregoing, all claims are in condition for allowance, which action is respectfully requested.

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Respectfully submitted,

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